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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/708,361	02/26/2004	Diana Yanakiev	81079897 FMC 1644 PUS	2360
28395 7590 07/27/2007 BROOKS KUSHMAN P.C./FGTL 1000 TOWN CENTER 22ND FLOOR SOUTHFIELD, MI 48075-1238			EXAMINER BEHNCKE, CHRISTINE M	
			ART UNIT 3661	PAPER NUMBER
			MAIL DATE 07/27/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/708,361

Applicant(s)

YANAKIEV, DIANA

Examiner

Christine M. Behncke

Art Unit

3661

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 May 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,17 and 22-26 is/are rejected.
- 7) ☒ Claim(s) 3-12,15,16 and 18-21 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>2/26/2004</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This office action is in response to the Election filed 9 May 2007, in which claims 1-26 were presented for examination.

Election/Restrictions

Applicant's request for reconsideration of the restriction requirement of the last Office action is persuasive and, therefore, the restriction/election of that action is withdrawn.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, 17, and 22-26 are rejected under 35 U.S.C. 102(b) as being anticipated by Cullen et al., US 6,295,500.

(Claims 1 and 14) Cullen et al. discloses a method for controlling a vehicle using nonlinear error based control, comprising: determining a current value of a first vehicle parameter (actual vehicle speed); determining a first error, the first error being a difference between a first target value of the first vehicle parameter and the current value of the first vehicle parameter (vehicle speed error); and determining a first vehicle request, the first vehicle request being nonlinear function of the first error (desired acceleration from speed control `accl_spd_req`, column 4, lines 44-54). Cullen further teaches wherein the nonlinear function is produced by applying a first gain to the first

Art Unit: 3661

error, thereby producing a first vehicle request, the first gain being a function of the absolute value of the first error (column 4, lines 44-54).

(Claim 2) Cullen et al. further discloses determining a second vehicle request (difference between driver demanded acceleration and “droop” control output `accl_droop`), and arbitrating the first and second vehicle requests (column 4, lines 37-42), thereby determining a first arbitrated vehicle request (`accl_arb_req`).

(Claim 17) Cullen et al. further discloses wherein the vehicle including a speed control system, wherein the parameter is a vehicle speed (actual vehicle speed), the target value of the parameter is a set point of the speed control system (set speed), the first error is a first speed error (vehicle speed error), and the first vehicle request is a speed control system desired acceleration (column 4, lines 44-54).

(Claim 22) Cullen et al. discloses a vehicle comprising: at least one torque producing device operable to propel the vehicle (traction control `trc_tqw_req`); at least one sensor configured to measure a vehicle parameter and to output signals related to the measured parameter (actual vehicle speed); and a controller configured to receive signals from the at least one sensor, determine a first error and a vehicle request, thereby facilitating control of the at least one torque producing device, the first error being a difference between a target value of the vehicle parameter and a measured value of the vehicle parameter, the vehicle request being a nonlinear function of the first error (column 4, lines 44-54).

Art Unit: 3661

(**Claim 23**) Cullen et al. further discloses wherein the vehicle request is used to determine an amount of torque requested from the at least one torque producing device (column 4, lines 55-65).

(**Claim 24**) Cullen et al. further discloses wherein the at least one torque producing device includes an engine, the vehicle further comprising a throttle operable to control the flow of air to the engine, and wherein the vehicle request is used to determine the throttle angle (column 4, line 55-column 5, line 24).

(**Claim 25**) Cullen et al. further discloses wherein at least one torque producing device includes an electric motor (motor 11), the vehicle further comprising a fuel cell operable to provide electricity to the motor and wherein the vehicle request is used to determine the amount of electricity provided to the motor (column 4, line 55-column 5, line 24, column 3, line 61-4, column 4, line 7).

(**Claim 26**) Cullen further discloses wherein the at least one torque providing device includes a diesel engine, and the vehicle request is used to determine a fueling rate of the diesel engine (column 4, line 55-column 5, line 24, column 7, lines 30-40).

Allowable Subject Matter

Claims 3-12, 15, 16, and 18-21 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

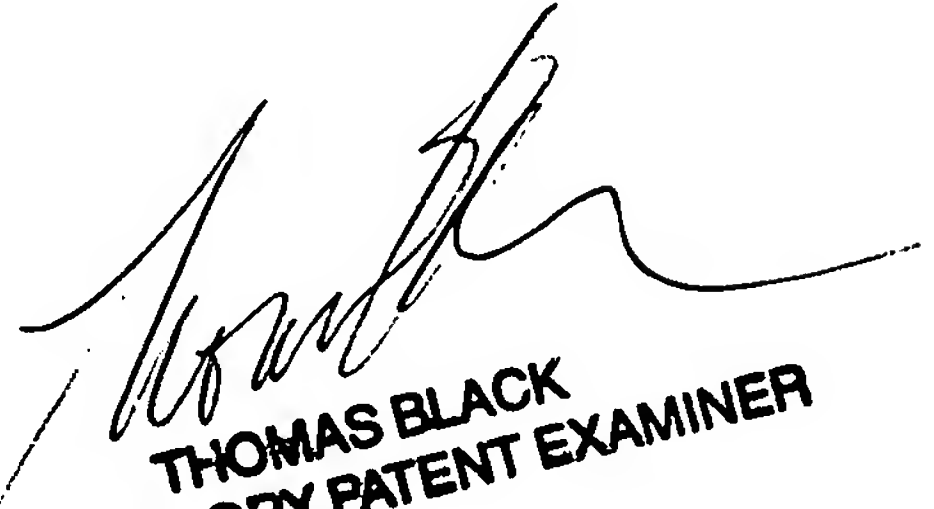
Art Unit: 3661

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christine M. Behncke whose telephone number is (571) 272-8103. The examiner can normally be reached on 8:30 am- 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas G. Black can be reached on (571) 272-6956. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

CMB


THOMAS BLACK
SUPERVISORY PATENT EXAMINER